

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-95. (canceled)

96. (currently amended) A producer vector comprising (a) one or more components of a ~~plant~~ tobacco mosaic virus; and (b) a polynucleotide of interest, wherein the vector is defective for cell-to-cell movement or systemic movement, and wherein the vector comprises at least one polynucleotide encoding a replicase protein of a plant virus and comprises sufficient non-coding portions to allow self-replication.

97. (currently amended) The producer vector of claim 96 or 107, wherein the vector is defective for both cell-to-cell movement and systemic movement.

98. (previously presented) A method of expressing a polynucleotide of interest comprising:
(a) introducing the vector of claim 97 into a plant or plant cell;
(b) maintaining the plant cell or plant cell under conditions and for a time sufficient that the polynucleotide is expressed.

99. (previously presented) The method of claim 98, wherein the polynucleotide encodes a pharmaceutical protein of interest.

100. (currently amended) The method of claim 98, wherein the method comprises steps of:
(~~e~~)-(a) introducing a second vector into the plant or plant cell, wherein the second vector, or both, comprises a gene that encodes a replicase protein;
(~~e~~)-(b) maintaining the plant or plant cell under conditions and for a time sufficient that the polynucleotide is expressed in at least some plant cells.

101. (currently amended) The method of claim 100, wherein the second vector comprises a polynucleotide of interest, the method comprising steps of:
(~~e~~)-maintaining the plant or plant cell under conditions and for a time sufficient that the polynucleotide of the second vector is expressed in at least some plant cells.

102. (previously presented) The method of claim 101, wherein the second vector comprises a

gene that encodes a replicase protein.

103. (previously presented) The method of claim 100, wherein the first and second polypeptides are polypeptide chains of a multimeric protein.
104. (currently amended) The method of claim 103, wherein the first and second polypeptides encode therapeutically active proteins of pharmaceutical interest.
105. (currently amended) The producer vector of claim 96 or 107, wherein the polynucleotide of interest encodes a pharmaceutical protein of interest.
106. (currently amended) A method of expressing a polynucleotide of interest comprising:
 - (a) introducing the vector of claim 96 or 107 into a plant cell;
 - (b) maintaining the plant cell under conditions and for a time sufficient that the polynucleotide is expressed.
107. (new) A producer vector comprising (a) one or more components of an alfalfa mosaic virus; and (b) a polynucleotide of interest, wherein the vector is defective for cell-to-cell movement or systemic movement, and wherein the vector comprises at least one polynucleotide encoding a replicase protein of a plant virus and comprises sufficient non-coding portions to allow self-replication.